

# AN EVALUATED NEUTRONIC DATA FILE FOR ELEMENTAL COBALT<sup>\*</sup>

by

P. Guenther, R. Lawson, J. Meadows, M. Sugimoto<sup>\*\*</sup>,  
A.B. Smith and D.L. Smith  
Argonne National Laboratory

and

R. Howerton  
Lawrence Livermore National Laboratory

## ABSTRACT

A comprehensive evaluated neutronic data file for elemental cobalt is described. The experimental data base, the calculational methods, the evaluation techniques and judgments, and the physical content are outlined. The file contains: i) neutron total and scattering cross sections and associated properties, ii) (n,2n) and (n,3n) processes, iii) neutron radiative capture processes, iv) charged-particle-emission processes, and v) photon-production processes. The file extends from  $10^{-5}$  eV to 20 MeV, and is presented in the ENDF/B-VI format. Detailed attention is given to the uncertainties and correlations associated with the prominent neutron-induced processes. The numerical contents of the file have been transmitted to the National Nuclear Data Center, Brookhaven National Laboratory.

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<sup>\*\*</sup> Permanent address: Japan Atomic Energy Research Institute, Tokai, Ibaraki, Japan.